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Frankevich, E. L. (see Yakovlev, B. S.)—842 [1574]

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—, V. P. Zimakov, and G. I. Kozlov. A Method for Infrared Diagnostics of a Plasma and Its Use for the Investigation of Ionization and Recombination of Xenon Behind the Front of a Shock Wave—1038 [1928]

Genkin, V. M. Multiphonon Raman Scattering of Light—1080 [2005]
Gergel', V. A., R. F. Kazarinov, and R. A. Suris. Rarefied Imperfect Bose Gas in a Field of Randomly Distributed Fixed Impurities—367 [686]
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Grinberg, A. A. Theory of the Photoelectric and Photomagnetic Effects Produced by Light Pressure—531 [989]
Gritsyna, V. V., T. S. Kiyan, A. G. Koval', and Ya. M. Fogel'. Ejection of Excited Slow Atoms and Molecules of Helium from a Carbon Film Produced during Bombardment of Solid Targets by a Beam of Fast Helium Ions—796 [1491]
Gurari, M. L. and M. A. Kozhushner. Contribution to the Theory of Phonon-assisted Transfer of Electronic Excitation Energy—1060 [1967]
Gurevich, A. V. and A. B. Shvartsburg. Exact Solutions of the Equations of Nonlinear Geometric Optics—1084 [2011]
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—, **I. I. Lyubimov, and V. G. Skobov.** Contribution to the Theory of Quantum Electromagnetic Waves in Metals in a Magnetic Field—391 [730]
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— and **N. M. Makarov.** Theory of Surface Electromagnetic Waves in Metals Located in a Weak Magnetic Field Field—1063 [1972]
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—— and V. A. Milyaev. Paramagnetic Relaxation Processes in $Al(NO_3)_3 \cdot 9H_2O : Fe^{3+}$ Single Crystals at Helium Temperatures—427 [796]

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Minaĭchev, E. V., G. G. Myasishcheva, Yu. V. Obukhov, V. S. Roganov, G. I. Savel'ev, and V. G. Firsov. Pachen-Back Effect for The Muonium Atom—849 [1586]

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Mirnov, V. V. (see Breĭzman, B. N.)—948 [1770]

Morgulis, N. D. and A. M. Przhonskiĭ. Nature of Ionization in a Photoresonant Cesium Plasma—1005 [1873]

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Nikolaev, V. I., F. I. Popov, and V. M. Cherepanov. Temperature Dependence of the Sublattice Magnetization of Lithium Ferrite-Chromites—276 [515]

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Okulov, V. I. (see Zyryanov, P. S.)—696 [1295]

Okunevich, A. I. and V. I. Perel'. Relaxation in the Sublevel System of the Excited States of Alkali Metal Atoms Colliding with Noble Gas Atoms—356 [666]

——. (see Zhitnikov, R. A.)—445 [831]

Oleĭnik, I. N. Second Sound and Hydrodynamical Thermal Conductivity in Antiferromagnetics—600 [1119]

——. Thermal Conductivity of a Ferromagnetic Dielectric with Allowance for Phonons in the Hydrodynamic Approximation—1195 [2213]

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